Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * *   Welcome to STN International   * * * * * * * * *

 NEWS 1   Web Page for STN Seminar Schedule - N. America
 NEWS 2 JAN 02   STN pricing information for 2008 now available
 NEWS 3 JAN 16   CAS patent coverage enhanced to include exemplified
                   prophetic substances
 NEWS 4 JAN 28   USPATFULL, USPAT2, and USPATOLD enhanced with new
                   custom IPC display formats
 NEWS 5 JAN 28   MARPAT searching enhanced
 NEWS 6 JAN 28   USGENE now provides USPTO sequence data within 3 days
                   of publication
 NEWS 7 JAN 28   TOXCENTER enhanced with reloaded MEDLINE segment
 NEWS 8 JAN 28   MEDLINE and LMEDLINE reloaded with enhancements
 NEWS 9 FEB 08   STN Express, Version 8.3, now available
 NEWS 10 FEB 20   PCI now available as a replacement to DPCI
 NEWS 11 FEB 25   IFIREF reloaded with enhancements
 NEWS 12 FEB 25   IMSPRODUCT reloaded with enhancements
 NEWS 13 FEB 29   WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                   U.S. National Patent Classification
 NEWS 14 MAR 31   IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                   IPC display formats
 NEWS 15 MAR 31   CAS REGISTRY enhanced with additional experimental
                   spectra
 NEWS 16 MAR 31   CA/CAplus and CASREACT patent number format for U.S.
                   applications updated
 NEWS 17 MAR 31   LPCI now available as a replacement to LDPCI
 NEWS 18 MAR 31   EMBASE, EMBAL, and LEMBASE reloaded with enhancements
 NEWS 19 APR 04   STN AnaVist, Version 1, to be discontinued
 NEWS 20 APR 15   WPIDS, WPINDEX, and WPIX enhanced with new
                   predefined hit display formats

 NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

 NEWS HOURS   STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN   Welcome Banner and News Items
 NEWS IPC8   For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

```
FILE 'HOME' ENTERED AT 06:10:50 ON 28 APR 2008

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY      SESSION
FULL ESTIMATED COST                                      0.21        0.21

FILE 'REGISTRY' ENTERED AT 06:11:13 ON 28 APR 2008
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STRUCTURE FILE UPDATES:   27 APR 2008  HIGHEST RN 1017684-24-0
DICTIONARY FILE UPDATES:  27 APR 2008  HIGHEST RN 1017684-24-0

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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REGISTRY includes numerically searchable data for experimental and
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experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY      SESSION
FULL ESTIMATED COST                                      0.46        0.67

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:11:24 ON 28 APR 2008

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LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 06:17:06 ON 28 APR 2008
FILE 'REGISTRY' ENTERED AT 06:17:06 ON 28 APR 2008
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY      SESSION
FULL ESTIMATED COST                                      0.46        0.67

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10549322\10549322 genus formula (I).str
```
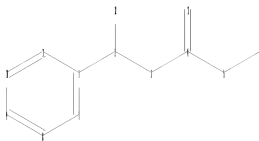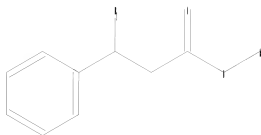
```
chain nodes :
2  3  4  5  6  12  13
ring nodes :
1  7  8  9  10  11
chain bonds :
1-2  2-3  2-12  3-4  4-5  4-13  5-6
ring bonds :
1-7  1-11  7-8  8-9  9-10  10-11
exact/norm bonds :
4-5  4-13  5-6
exact bonds :
1-2  2-3  2-12  3-4
normalized bonds :
1-7  1-11  7-8  8-9  9-10  10-11


Hydrogen count :
2:>= minimum 1  3:>= minimum 2
Match level :
1:Atom  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:Atom  8:Atom  9:Atom
10:Atom  11:Atom  12:CLASS  13:CLASS
Element Count :
Node 6: Limited
    C,C2-5




L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR
```
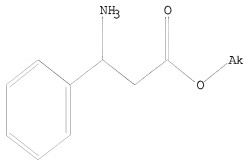


```
Structure attributes must be viewed using STN Express query preparation.
```

```
=> search ll sss sam
SAMPLE SEARCH INITIATED 06:17:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    21822 TO ITERATE

  9.2% PROCESSED    2000 ITERATIONS                         0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       427597 TO   445283
PROJECTED ANSWERS:               0 TO        0

L2          0 SEA SSS SAM L1

=> search ll sss full
FULL SEARCH INITIATED 06:18:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   434251 TO ITERATE

 98.6% PROCESSED   427960 ITERATIONS                       0 ANSWERS

100.0% PROCESSED   434251 ITERATIONS                       0 ANSWERS
SEARCH TIME: 00.00.23

L3          0 SEA SSS FUL L1

=> logoff hold
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                              179.28     179.49

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:18:47 ON 28 APR 2008

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 07:34:48 ON 28 APR 2008
FILE 'REGISTRY' ENTERED AT 07:34:48 ON 28 APR 2008
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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                              179.28     179.49

=> d his

     (FILE 'HOME' ENTERED AT 06:10:50 ON 28 APR 2008)

     FILE 'REGISTRY' ENTERED AT 06:11:13 ON 28 APR 2008
L1          STRUCTURE UPLOADED
L2          0 SEARCH L1 SSS SAM
```

```
L3              0 SEARCH L1 SSS FULL

=> logoff
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY      SESSION
FULL ESTIMATED COST                             179.74      179.95

STN INTERNATIONAL LOGOFF AT 07:35:10 ON 28 APR 2008



Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1        Web Page for STN Seminar Schedule - N. America
 NEWS  2  JAN 02  STN pricing information for 2008 now available
 NEWS  3  JAN 16  CAS patent coverage enhanced to include exemplified
                  prophetic substances
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                  of publication
 NEWS  7  JAN 28  TOXCENTER enhanced with reloaded MEDLINE segment
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                  U.S. National Patent Classification
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                  IPC display formats
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                  spectra
 NEWS 16  MAR 31  CA/CAplus and CASREACT patent number format for U.S.
                  applications updated
 NEWS 17  MAR 31  LPCI now available as a replacement to LDPCI
 NEWS 18  MAR 31  EMBASE, EMBAL, and LEMBASE reloaded with enhancements
 NEWS 19  APR 04  STN AnaVist, Version 1, to be discontinued
 NEWS 20  APR 15  WPIDS, WPINDEX, and WPIX enhanced with new
                  predefined hit display formats
 NEWS 21  APR 28  EMBASE Controlled Term thesaurus enhanced
 NEWS 22  APR 28  IMSRESEARCH reloaded with enhancements

 NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
```

```
FILE 'HOME' ENTERED AT 13:34:40 ON 08 MAY 2008

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 13:34:58 ON 08 MAY 2008
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STRUCTURE FILE UPDATES:    7 MAY 2008  HIGHEST RN 1019993-29-3
DICTIONARY FILE UPDATES:   7 MAY 2008  HIGHEST RN 1019993-29-3

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10549322\10549322 genus formula (I).str
```



```
chain nodes :
```

```
2   3   4   5   6   12   13
ring nodes :
1   7   8   9   10   11
chain bonds :
1-2   2-3   2-12   3-4   4-5   4-13   5-6
ring bonds :
1-7   1-11   7-8   8-9   9-10   10-11
exact/norm bonds :
4-5   4-13   5-6
exact bonds :
1-2   2-3   2-12   3-4
normalized bonds :
1-7   1-11   7-8   8-9   9-10   10-11


Hydrogen count :
2:>= minimum 1   3:>= minimum 2
Match level :
1:Atom  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:Atom  8:Atom  9:Atom
10:Atom  11:Atom  12:CLASS  13:CLASS
Element Count :
Node 6: Limited
     C,C2-5




L1       STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR
```



```
Structure attributes must be viewed using STN Express query preparation.


=> search l1 sss sam
SAMPLE SEARCH INITIATED 13:36:14 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    21884 TO ITERATE

   9.1% PROCESSED     2000 ITERATIONS                          0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:      428825 TO   446535
```

PROJECTED ANSWERS: 0 TO   0

L2   0 SEA SSS SAM L1

=> search l1 sss full
FULL SEARCH INITIATED 13:36:29 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   435397 TO ITERATE

100.0% PROCESSED   435397 ITERATIONS   0 ANSWERS
SEARCH TIME: 00.00.16

L3   0 SEA SSS FUL L1

=> logoff hold
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                 ENTRY   SESSION
FULL ESTIMATED COST   179.28   179.49

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:37:02 ON 08 MAY 2008

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Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 13:45:43 ON 08 MAY 2008
FILE 'REGISTRY' ENTERED AT 13:45:43 ON 08 MAY 2008
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COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                 ENTRY   SESSION
FULL ESTIMATED COST   179.74   179.95

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10549322\10549322 acid genus formula (I).str
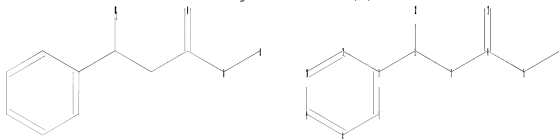
chain nodes :
2   3   4   5   6   12   13
ring nodes :
1   7   8   9   10   11
chain bonds :
1-2   2-3   2-12   3-4   4-5   4-13   5-6
ring bonds :
1-7   1-11   7-8   8-9   9-10   10-11

```
exact bonds :
1-2   2-3   2-12   3-4   5-6
normalized bonds :
1-7   1-11   4-5   4-13   7-8   8-9   9-10   10-11


Hydrogen count :
2:>= minimum 1  3:>= minimum 2
Match level :
1:Atom  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:Atom  8:Atom  9:Atom
10:Atom  11:Atom  12:CLASS  13:CLASS
Element Count :
Node 6: Limited
     C,C2-5
```
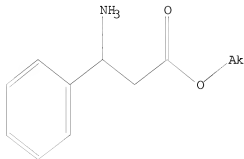
```
L4      STRUCTURE UPLOADED

=> d l4
L4 HAS NO ANSWERS
L4              STR
```
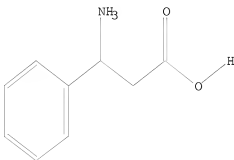


```
Structure attributes must be viewed using STN Express query preparation.


=> search l4 sss sam
SAMPLE SEARCH INITIATED 13:46:42 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    12065 TO ITERATE

 16.6% PROCESSED    2000 ITERATIONS                           0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:      234718 TO  247882
PROJECTED ANSWERS:             0 TO       0

L5           0 SEA SSS SAM L4

=> search l4 sss full
FULL SEARCH INITIATED 13:46:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   241376 TO ITERATE

100.0% PROCESSED   241376 ITERATIONS                          0 ANSWERS
```

```
SEARCH TIME: 00.00.02

L6          0 SEA SSS FUL L4

=> e 3-phenylpropanoic acid/cn
E1          1    3-PHENYLPROPANETHIOL/CN
E2          1    3-PHENYLPROPANOATE-2,2-D2/CN
E3          1 --> 3-PHENYLPROPANOIC ACID/CN
E4          1    3-PHENYLPROPANOIC ACID CHLORIDE/CN
E5          1    3-PHENYLPROPANOIC ACID ETHYL ESTER/CN
E6          1    3-PHENYLPROPANOIC ACID HYDRAZIDE/CN
E7          1    3-PHENYLPROPANOIC ACID METHYL ESTER/CN
E8          1    3-PHENYLPROPANOIC ACID N-((5-HYDROXY-4-OXO-4H-PYRAN-2-YL)MET
                 HYL)AMIDE/CN
E9          1    3-PHENYLPROPANOIC ACID N-((5-HYDROXY-4-THIOXO-4H-PYRAN-2-YL)
                 METHYL)AMIDE/CN
E10         1    3-PHENYLPROPANOIC-1-13C ACID/CN
E11         1    3-PHENYLPROPANOL/CN
E12         1    3-PHENYLPROPANONITRILE/CN

=> e 3-aminopropanoic acid/cn
E1          1    3-AMINOPROPANETHIOL-35S/CN
E2          1    3-AMINOPROPANOATE ION/CN
E3          1 --> 3-AMINOPROPANOIC ACID/CN
E4          1    3-AMINOPROPANOIC ACID BENZYL ESTER/CN
E5          1    3-AMINOPROPANOIC ACID ETHYL ESTER HYDROCHLORIDE/CN
E6          1    3-AMINOPROPANOIC ACID HYDROCHLORIDE/CN
E7          1    3-AMINOPROPANOIC ACID METHYL ESTER/CN
E8          1    3-AMINOPROPANOIC ACID TERT-BUTYL ESTER HYDROCHLORIDE/CN
E9          1    3-AMINOPROPANOL/CN
E10         1    3-AMINOPROPANOL CYCLIC BUTANEBORONATE/CN
E11         1    3-AMINOPROPANOL DEHYDROGENASE/CN
E12         1    3-AMINOPROPANOL HYDROCHLORIDE/CN

=> e 3-phenyl-3-aminopropanoic acid/cn
E1          1    3-PHENYL-3-(TRIS(4-TOLYL)GERMYL)PROPANOIC ACID/CN
E2          1    3-PHENYL-3-AMINOACRYLONITRILE/CN
E3          0 --> 3-PHENYL-3-AMINOPROPANOIC ACID/CN
E4          1    3-PHENYL-3-AZABICYCLO(3.2.2)NONANE/CN
E5          1    3-PHENYL-3-AZABICYCLO(3.2.2)NONANE, PERCHLORATE/CN
E6          1    3-PHENYL-3-AZABICYCLO(3.2.2)NONANE, PICRATE/CN
E7          1    3-PHENYL-3-AZAPENTANE-1,5-DIOL/CN
E8          1    3-PHENYL-3-BENZYL-N-METHYLSUCCINIMIDE/CN
E9          1    3-PHENYL-3-BOC-AMINOPROPIONALDEHYDE/CN
E10         1    3-PHENYL-3-BUTEN-1-OL/CN
E11         1    3-PHENYL-3-BUTEN-2-OL/CN
E12         1    3-PHENYL-3-BUTEN-2-ONE/CN

=> logoff hold
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                ENTRY       SESSION
FULL ESTIMATED COST                             359.94       360.15

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:48:57 ON 08 MAY 2008

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Welcome to STN International!  Enter x:x
```

```
LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 13:53:23 ON 08 MAY 2008
FILE 'REGISTRY' ENTERED AT 13:53:23 ON 08 MAY 2008
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COST IN U.S. DOLLARS                          SINCE FILE     TOTAL
                                                 ENTRY     SESSION
FULL ESTIMATED COST                             359.94      360.15

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE     TOTAL
                                                 ENTRY     SESSION
FULL ESTIMATED COST                             360.86      361.07

FILE 'CAPLUS' ENTERED AT 13:54:19 ON 08 MAY 2008
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FILE LAST UPDATED: 7 May 2008  (20080507/ED)

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They are available for your review at:

http://www.cas.org/infopolicy.html

=> 614-19-7
   REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




L8       365 L7


=> hydrolase or lipase or esterase
        24356 HYDROLASE
         9218 HYDROLASES
        28918 HYDROLASE
                (HYDROLASE OR HYDROLASES)
        52101 LIPASE
```

```
          9026 LIPASES
         53506 LIPASE
               (LIPASE OR LIPASES)
        33471 ESTERASE
        11504 ESTERASES
        38131 ESTERASE
               (ESTERASE OR ESTERASES)
L9      112871 HYDROLASE OR LIPASE OR ESTERASE

=> 18 and 19
L10         5 L8 AND L9

=> d l10 1-5 ti

L10  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Cloning and characterization of a novel β-transaminase from
     Mesorhizobium sp. strain LUK: a new biocatalyst for the synthesis of
     enantiomerically pure β-amino acids

L10  ANSWER 2 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Lipase-catalyzed resolution of chiral 1,3-amino alcohols:
     application in the asymmetric synthesis of (S)-dapoxetine

L10  ANSWER 3 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Enzymatic resolution of N-protected-β3-amino methyl esters, using
     lipase B from Candida antarctica

L10  ANSWER 4 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of substituted β-amino acid derivatives useful as
     platelet aggregation inhibitors

L10  ANSWER 5 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Comparative analysis of the effect of low-molecular-weight substrate
     fragments and their analogs on the activity of phospholipases A2 from pig
     pancreas and cobra and bee venoms


=> d l10 1-5 ti fbib abs

L10  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Cloning and characterization of a novel β-transaminase from
     Mesorhizobium sp. strain LUK: a new biocatalyst for the synthesis of
     enantiomerically pure β-amino acids
AN   2007:362254  CAPLUS
DN   147:25735
TI   Cloning and characterization of a novel β-transaminase from
     Mesorhizobium sp. strain LUK: a new biocatalyst for the synthesis of
     enantiomerically pure β-amino acids
AU   Kim, Juhan; Kyung, Dohyun; Yun, Hyungdon; Cho, Byung-Kwan; Seo, Joo-Hyun;
     Cha, Minho; Kim, Byung-Gee
CS   Institute for Molecular Biology and Genetics and School of Chemical and
     Biological Engineering, Seoul National University, Seoul, 151-742, S.
     Korea
SO   Applied and Environmental Microbiology (2007), 73(6), 1772-1782
     CODEN: AEMIDF; ISSN: 0099-2240
PB   American Society for Microbiology
DT   Journal
LA   English
AB   A novel β-transaminase gene was cloned from Mesorhizobium sp. strain
     LUK.  By using N-terminal sequence and an internal protein sequence, a
     digoxigenin-labeled probe was made for nonradioactive hybridization, and a
     2.5-kb gene fragment was obtained by colony hybridization of a cosmid
```

library. Through Southern blotting and sequence anal. of the selected
cosmid clone, the structural gene of the enzyme (1335 bp) was identified,
which encodes a protein of 47,244 Da with a theor. pI of 6.2. The deduced
amino acid sequence of the β-transaminase showed the highest sequence
similarity with glutamate-1-semialdehyde aminomutase of transaminase
subgroup II. The β-transaminase showed higher activities toward
D-β-aminocarboxylic acids such as 3-aminobutyric acid,
3-amino-5-methylhexanoic acid, and 3-amino-3-phenylpropionic acid. The
β-transaminase has an unusually broad specificity for amino acceptors
such as pyruvate and α-ketoglutarate/oxaloacetate. The
enantioselectivity of the enzyme suggested that the recognition mode of
β-aminocarboxylic acids in the active site is reversed relative to
that of α-amino acids. After comparison of its primary structure
with transaminase subgroup II enzymes, it was proposed that R43 interacts
with the carboxylate group of β-aminocarboxylic acids and the
carboxylate group on the side chain of dicarboxylic α-keto acids
such as α-ketoglutarate and oxaloacetate. R404 is another conserved
residue, which interacts with the α-carboxylate group of the
α-amino acids and α-keto acids. The β-transaminase was
used for the asym. synthesis of enantiomerically pure β-
aminocarboxylic acids. (3S)-Amino-3-phenylpropionic acid was produced
from the ketocarboxylic acid ester substrate by coupled reaction with a
lipase using 3-aminobutyric acid as amino donor.

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
TI   Lipase-catalyzed resolution of chiral 1,3-amino alcohols:
     application in the asymmetric synthesis of (S)-dapoxetine
AN   2006:374475 CAPLUS
DN   145:6664
TI   Lipase-catalyzed resolution of chiral 1,3-amino alcohols:
     application in the asymmetric synthesis of (S)-dapoxetine
AU   Torre, Oliver; Gotor-Fernandez, Vicente; Gotor, Vicente
CS   Departamento de Quimica Organica e Inorganica, Universidad de Oviedo,
     Oviedo, 33071, Spain
SO   Tetrahedron: Asymmetry (2006), 17(5), 860-866
     CODEN: TASYE3; ISSN: 0957-4166
PB   Elsevier B.V.
DT   Journal
LA   English
OS   CASREACT 145:6664
AB   The enzymic resolution of 3-amino-3-phenylpropan-1-ol derivs. has been
     studied through acylation processes. Candida antarctica lipase
     A (CAL-A) has been identified as the best biocatalyst for the
     transesterification reaction of 3-amino-3-phenyl-1-tert-
     butyldimethylsilyloxy-propan-1-ol using Et methoxyacetate as acylating
     agent and tert-Bu Me ether as solvent. This enzymic study has allowed us
     to obtain a valuable intermediate for the production of (S)-dapoxetine, which
     has been synthesized in good overall yield and high enantiomeric excess.

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
TI   Enzymatic resolution of N-protected-β3-amino methyl esters, using
     lipase B from Candida antarctica
AN   2005:124717 CAPLUS
DN   142:355544
TI   Enzymatic resolution of N-protected-β3-amino methyl esters, using
     lipase B from Candida antarctica
AU   Flores-Sanchez, Patricia; Escalante, Jaime; Castillo, Edmundo
CS   Centro de Investigaciones Quimicas, Universidad Autonoma del Estado de

```
AB   Racemic β3-amino Me esters bearing the amine function protected with
     COPh (Bz), benzyloxycarbonyl(Cbz), tert-butoxycarbonyl (Boc),
     9-fluorenylmethyloxycarbonyl(Fmoc) and as aminobenzamide, were resolved by
     enantiospecific transesterifications catalyzed by lipase B from
     Candida antarctica.  The reactions proceeded with a high conversion and
     yielded enantiomerically pure enantiomers.
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RE.CNT  33    THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


L10  ANSWER 4 OF 5  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of substituted β-amino acid derivatives useful as
     platelet aggregation inhibitors
AN   1993:539779  CAPLUS
DN   119:139779
OREF 119:25107a,25110a
TI   Preparation of substituted β-amino acid derivatives useful as
     platelet aggregation inhibitors
IN   Bovy, Philippe Roger; Rico, Joseph Gerace; Rogers, Thomas Edward; Tjoeng,
     Foe Siong; Zablocki, Jeffery Alan
PA   Monsanto Co., USA; G.D. Searle and Co.
SO   PCT Int. Appl., 140 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 4
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PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI WO 9307867	A1	19930429	WO 1992-US8512		19921006

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         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG
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PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
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			US 1992-866933	A	19920410
US 5239113	A	19930824	US 1992-866933		19920410
			US 1991-777811	B2	19911015
AU 9227608	A	19930521	AU 1992-27608		19921006
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EP 614360	B1	19970319			

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PI   US 5344957           A     19940906    US 1992-953601        19921006
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         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
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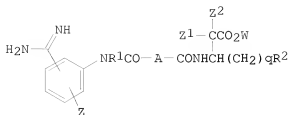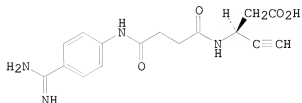
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II

AB   The title β-amino acid derivs. I (R1 = H, optionally substituted
      lower alkyl, lower alkenyl, aryl, benzyl, phenethyl; R2, W = independently
      H, optionally substituted lower alkyl, lower alkenyl, lower alkynyl,
      cycloalkyl, aryl; A = divalent optionally substituted lower alkyl, lower
      alkenyl, lower alkynyl, cycloalkyl; Z, Z1, Z2 = independently H, OH, lower
      alkyl, halo, alkoxy, cyano, sulfonyl, carboxyl, alkoxycarbonyl; q = 0-6,
      with provisos) and pharmaceutical salts and compns. were prepared as compds.
      for inhibiting or modulating platelet aggregation. Thus, coupling of
      benzamidine acid 4-[HN:C(NH2)]C6H4NHCOCH2CH2CO2H.HCl (preparation given) with
      (S)-HC.tplbond.CCH(NH2)CH2CO2Et, followed by hydrolysis with pig liver
      esterase, gave pentynoic acid derivative II. II inhibited platelet
      aggregation in vitro with IC50 = 0.07 µM.

L10   ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
TI   Comparative analysis of the effect of low-molecular-weight substrate
      fragments and their analogs on the activity of phospholipases A2 from pig
      pancreas and cobra and bee venoms
AN   1978:18083 CAPLUS
DN   88:18083
OREF 88:2875a,2878a
TI   Comparative analysis of the effect of low-molecular-weight substrate
      fragments and their analogs on the activity of phospholipases A2 from pig
      pancreas and cobra and bee venoms
AU   Litvinko, N. M.; Khurgin, Yu. I.; Kaverzneva, E. D.; Akhrem, A. A.
CS   Inst. Org. Khim. im. Zelinskogo, Moscow, USSR
SO   Vestsi Akademii Navuk BSSR, Seryya Khimichnykh Navuk (1977), (5), 105-13
      CODEN: VBSKAK; ISSN: 0002-3590
DT   Journal
LA   Russian
AB   The inhibitory effect of alkylammonium compds. (R1R2R3R4N+), amino acids,
      peptides, aminoesters of benzoic acid, and choline analogs,
      [(Me)3N+(CH2)nXR]·Y, on the activity of phospholipase A2 from pig
      pancreas, cobra venom, and bee venom was studied using a gel diffusion
      method in lecithin-agarose gel. The results indicate that there are 3
      centers in the phospholipase A2 active site: a catalytic (esterase
) center, a cationic center, and an anionic center. The pancreatic and
      snake venom enzymes showed some similar reaction characteristics, whereas
      the bee enzyme showed greater differences. The contribution of each
      subsite in substrate interaction apparently differs in enzymes from
      different sources.

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=> d his

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L2          0 SEARCH L1 SSS SAM
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L5          0 SEARCH L4 SSS SAM
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               E 3-PHENYLPROPANOIC ACID/CN
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L7          1 S 614-19-7/RN

     FILE 'CAPLUS' ENTERED AT 13:54:54 ON 08 MAY 2008
L8        365 S L7
L9     112871 HYDROLASE OR LIPASE OR ESTERASE
L10         5 L8 AND L9

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ANSWER SET L8 HAS BEEN SAVED AS 'PRODACIDS/A'

=> logoff hold
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                  ENTRY     SESSION
FULL ESTIMATED COST                               36.68      398.69

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                               -4.00       -4.00

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:00:38 ON 08 MAY 2008

Connecting via Winsock to STN




Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 14:05:45 ON 08 MAY 2008
FILE 'CAPLUS' ENTERED AT 14:05:45 ON 08 MAY 2008
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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
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FULL ESTIMATED COST                               36.68      398.69

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                      -4.00       -4.00

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DICTIONARY FILE UPDATES:   7 MAY 2008  HIGHEST RN 1019993-29-3

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  Please note that search-term pricing does apply when
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predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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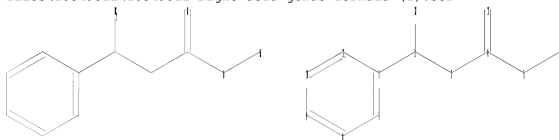


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exact bonds :
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2:>= minimum 1  3:>= minimum 2
Match level :
1:Atom  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:Atom  8:Atom  9:Atom
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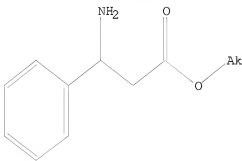


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Structure attributes must be viewed using STN Express query preparation.


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SAMPLE SCREEN SEARCH COMPLETED -    21884 TO ITERATE

   9.1% PROCESSED     2000 ITERATIONS                          3 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        428825 TO   446535
PROJECTED ANSWERS:              313 TO      999

L12          3 SEA SSS SAM L11

=> d scan

L12  3 ANSWERS   REGISTRY  COPYRIGHT 2008 ACS on STN
IN   [1,1'-Biphenyl]-4-propanoic acid, β-amino-, 1,1-dimethylethyl ester,
     (βS)-
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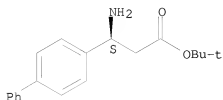
Absolute stereochemistry. Rotation (-).

NH2 / O — C — CH2 — OBu-t structure with S configuration on phenyl ring bearing Ph substituent
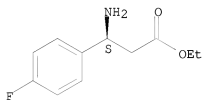
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L12 3 ANSWERS   REGISTRY COPYRIGHT 2008 ACS on STN
IN   Benzenepropanoic acid, β-amino-4-fluoro-, ethyl ester, (βS)-
MF   C11 H14 F N O2

Absolute stereochemistry.

NH2 / O structure with S configuration, OEt group, phenyl ring bearing F substituent

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L12 3 ANSWERS   REGISTRY COPYRIGHT 2008 ACS on STN
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NH2   O
CH—CH2—C—OEt structure with phenyl ring bearing NC substituent
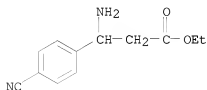
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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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100.0% PROCESSED    435397 ITERATIONS                              510 ANSWERS
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CA SUBSCRIBER PRICE                                     0.00      -4.00

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FILE LAST UPDATED: 7 May 2008  (20080507/ED)

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L14       321 L13

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L6             0 SEARCH L4 SSS FULL
                 E 3-PHENYLPROPANOIC ACID/CN
                 E 3-AMINOPROPANOIC ACID/CN
                 E 3-PHENYL-3-AMINOPROPANOIC ACID/CN

      FILE 'CAPLUS' ENTERED AT 13:54:19 ON 08 MAY 2008
                 S 614-19-7/REG#

      FILE 'REGISTRY' ENTERED AT 13:54:54 ON 08 MAY 2008
L7             1 S 614-19-7/RN

      FILE 'CAPLUS' ENTERED AT 13:54:54 ON 08 MAY 2008
L8           365 S L7
L9        112871 HYDROLASE OR LIPASE OR ESTERASE
L10            5 L8 AND L9
                 SAVE TEMP L8 PRODACIDS/A

      FILE 'REGISTRY' ENTERED AT 14:09:36 ON 08 MAY 2008
L11              STRUCTURE UPLOADED
L12            3 SEARCH L11 SSS SAM
L13          510 SEARCH L11 SSS FULL
                 SAVE TEMP L13 RAWESTERS/A

      FILE 'CAPLUS' ENTERED AT 14:11:35 ON 08 MAY 2008
L14          321 L13
                 SAVE TEMP ESTERREFS/A L14

=> l9 and l14
L15           20 L9 AND L14

=> save temp l20 centrHits/a
L20 NOT FOUND
The L-number entered has not been defined in this session, or it
has been deleted.  To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> save temp l15 centrHits/a
ANSWER SET L15 HAS BEEN SAVED AS 'CENTRHITS/A'

=> d l15 20-15 ti
'20-15' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
```

```
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d l15 15-20 ti

L15  ANSWER 15 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of enantiomerically-enriched amino acid derivatives having
     photocleavable bonds

L15  ANSWER 16 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of highly enantiopure β-amino esters by Candida
     antarctica lipase A

L15  ANSWER 17 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of enantiomerically enriched aromatic β-amino acids via
     enzymatic resolution

L15  ANSWER 18 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Variable molecular weight tags for nucleic acids and analysis of nucleic
```

```
      acid reactions by mass spectrometry

L15   ANSWER 19 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Preparation of [[[(amidinophenyl)amino]dioxoalkyl]amino]alkanoates as
      platelet aggregation inhibitors.

L15   ANSWER 20 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Preparation of substituted β-amino acid derivatives useful as
      platelet aggregation inhibitors


=> d l15 15-17 ti fbib abs

L15   ANSWER 15 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Preparation of enantiomerically-enriched amino acid derivatives having
      photocleavable bonds
AN    2001:167955  CAPLUS
DN    134:193745
TI    Preparation of enantiomerically-enriched amino acid derivatives having
      photocleavable bonds
IN    Skead, Benjamin M.; Faulconbridge, Susan J.; Winter, Stephen B. D.; Lock,
      Christopher J.
PA    Qiagen Genomics, Inc., USA
SO    PCT Int. Appl., 36 pp.
      CODEN: PIXXD2
DT    Patent
LA    English
FAN.CNT 1
      PATENT NO.            KIND    DATE        APPLICATION NO.         DATE
      ---------------       ----    --------    --------------------    --------
PI    WO 2001016090         A1      20010308    WO 2000-US24347         20000831
          W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
              HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
              LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
              YU, ZA, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                US 1999-151769P    P  19990831
      CA 2384191            A1      20010308    CA 2000-2384191        20010308
                                                US 1999-151769P    P  19990831
                                                WO 2000-US24347    W  20000831
      EP 1208079            A1      20020529    EP 2000-961549         20000831
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL
                                                US 1999-151769P    P  19990831
                                                WO 2000-US24347    W  20000831
      BR 2000013024         A       20020618    BR 2000-13024          20020618
                                                US 1999-151769P    P  19990831
                                                WO 2000-US24347    W  20000831
      JP 2003508378         T       20030304    JP 2001-519660         20030304
                                                US 1999-151769P    P  19990831
                                                WO 2000-US24347    W  20000831
      MX 2002PA02265        A       20030410    MX 2002-PA02265        20020228
                                                US 1999-151769P    P  19990831
                                                WO 2000-US24347    W  20000831
OS    CASREACT 134:193745; MARPAT 134:193745
GI
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB   Compds. I and I [R1 is halogen or an organic moiety; R2 and R3 are H or organic
     moieties having a mass greater than 15 Daltons or R2 and R3 together form
     a carbonyl group or may be joined together within a cyclic structure; Z is
     an (n + 1)-valent atom excluding carbon where n is > 0; R4 is H, halogen,
     or an organic moiety having a mass greater than 15 Daltons, with the proviso
     that at least one R4 (namely R4a) is an organic moiety having a mass greater
     than 100 Daltons; R5 is halogen or an organic moiety having a mass of less
     than 500 Daltons; m is 0-4; if R2 = R3 = H, then R1 is not CO2H or CO2Me
     when Z(R4)n is either of NHCOCH(Bu-i)NHCO(CH2Ph or -O-Bu-t) and R4 is not
     CH2CO2-Bu-t when Z is OH], or a mixture containing one of the isomers I or II
in
     excess, were prepared for use as tags, including tags detectable by mass
     spectrometry. Thus, compds. II (RCO2H are carboxylic acids having
     variable mass units (VMUs) in the range 90-298 amu) were prepared and
     conjugated to 5'-aminohexyl-tailed oligonucleotides.
RE.CNT 4   THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
TI   Preparation of highly enantiopure β-amino esters by Candida
     antarctica lipase A
AN   2001:167353 CAPLUS
DN   135:33216
TI   Preparation of highly enantiopure β-amino esters by Candida
     antarctica lipase A
AU   Gedey, S.; Liljeblad, A.; Lazar, L.; Fulop, F.; Kanerva, L. T.
CS   Department of Chemistry and Laboratory of Synthetic Drug Chemistry,
     University of Turku, Turku, FIN-20520, Finland
SO   Tetrahedron: Asymmetry (2001), 12(1), 105-110
     CODEN: TASYE3; ISSN: 0957-4166
PB   Elsevier Science Ltd.
DT   Journal
LA   English
OS   CASREACT 135:33216
AB   The enantioselectivities for the reactions of aliphatic β-substituted
     β-amino esters [RCH(NH2)CH2CO2Et with R = Me, Et, n-Pr, i-Pr, Et2CH,
     cyclohexyl, Ph] with Bu butanoate in neat Bu butanoate and with
     2,2,2-trifluoroethyl butanoate in diisopropyl ether were studied in the
     presence of Candida antarctica lipase A. Enantioselectivities
     ranging from good (E = 70-100) to excellent (E >100) were commonly observed,
     allowing gram-scale resolution of the substrates. Highly enantioselective
     acylations catalyzed by CAL-A were studied.
RE.CNT 13   THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
TI   Preparation of enantiomerically enriched aromatic β-amino acids via
     enzymatic resolution
AN   2000:270001 CAPLUS
DN   133:43775
TI   Preparation of enantiomerically enriched aromatic β-amino acids via
     enzymatic resolution
AU   Faulconbridge, Susan J.; Holt, Karen E.; Sevillano, Luis Garcia; Lock,
     Christopher J.; Tiffin, Peter D.; Tremayne, Neil; Winter, Stephen
CS   Celltech Chiroscience Ltd, Cambridge Science Park, Cambridge, CB4 0WG, UK
SO   Tetrahedron Letters (2000), 41(15), 2679-2681
     CODEN: TELEAY; ISSN: 0040-4039
PB   Elsevier Science Ltd.

```
DT    Journal
LA    English
OS    CASREACT 133:43775
AB    A range of enantiomerically enriched aromatic β-amino acids with high ee
      were prepared via lipase-catalyzed enzymic resolution of Et ester
      derivs.
RE.CNT  8      THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY      SESSION
FULL ESTIMATED COST                                    16.65       597.50

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY      SESSION
CA SUBSCRIBER PRICE                                    -2.40        -6.40

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:19:01 ON 08 MAY 2008

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LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


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 NEWS  1        Web Page for STN Seminar Schedule - N. America
 NEWS  2  JAN 02  STN pricing information for 2008 now available
 NEWS  3  JAN 16  CAS patent coverage enhanced to include exemplified
                  prophetic substances
 NEWS  4  JAN 28  USPATFULL, USPAT2, and USPATOLD enhanced with new
                  custom IPC display formats
 NEWS  5  JAN 28  MARPAT searching enhanced
 NEWS  6  JAN 28  USGENE now provides USPTO sequence data within 3 days
                  of publication
 NEWS  7  JAN 28  TOXCENTER enhanced with reloaded MEDLINE segment
 NEWS  8  JAN 28  MEDLINE and LMEDLINE reloaded with enhancements
 NEWS  9  FEB 08  STN Express, Version 8.3, now available
 NEWS 10  FEB 20  PCI now available as a replacement to DPCI
 NEWS 11  FEB 25  IFIREF reloaded with enhancements
 NEWS 12  FEB 25  IMSPRODUCT reloaded with enhancements
 NEWS 13  FEB 29  WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                  U.S. National Patent Classification
 NEWS 14  MAR 31  IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                  IPC display formats
 NEWS 15  MAR 31  CAS REGISTRY enhanced with additional experimental
                  spectra
 NEWS 16  MAR 31  CA/CAplus and CASREACT patent number format for U.S.
                  applications updated
 NEWS 17  MAR 31  LPCI now available as a replacement to LDPCI
 NEWS 18  MAR 31  EMBASE, EMBAL, and LEMBASE reloaded with enhancements
```

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NEWS 19  APR 04  STN AnaVist, Version 1, to be discontinued
NEWS 20  APR 15  WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
NEWS 21  APR 28  EMBASE Controlled Term thesaurus enhanced
NEWS 22  APR 28  IMSRESEARCH reloaded with enhancements
NEWS 23  MAY 30  INPAFAMDB now available on STN for patent family
                 searching
NEWS 24  MAY 30  DGENE, PCTGEN, and USGENE enhanced with new homology
                 sequence search option
NEWS 25  JUN 06  EPFULL enhanced with 260,000 English abstracts
NEWS 26  JUN 06  KOREAPAT updated with 41,000 documents

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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NEWS LOGIN    Welcome Banner and News Items
NEWS IPC8     For general information regarding STN implementation of IPC 8

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* * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:10:31 ON 09 JUN 2008

=> ile regf
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files.  For example, the EXPAND
command can only be used to look at the index in a file which has an
index.  Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> file casreact
COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
                                                      ENTRY      SESSION
FULL ESTIMATED COST                                    0.21         0.21

FILE 'CASREACT' ENTERED AT 08:10:52 ON 09 JUN 2008
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for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 7 Jun 2008 VOL 148 ISS 24

New CAS Information Use Policies, enter HELP USAGETERMS for details.

**********************************************************
*                                                        *
*     CASREACT now has more than 13.8 million reactions  *
*                                                        *
**********************************************************
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999)
provided by InfoChem, INPI data prior to 1986, and Biotransformations
database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

```
=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10549322\10549322  Group III process.str
```
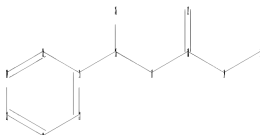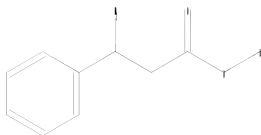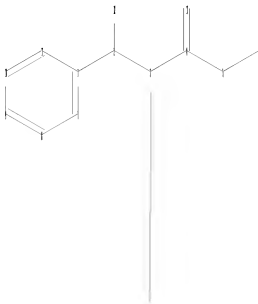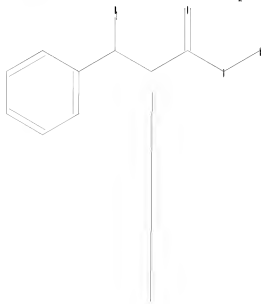


```
chain nodes :
2  3  4  5  6  12  13  16  17  18  19  20  26  27
ring nodes :
1  7  8  9  10  11  15  21  22  23  24  25
chain bonds :
1-2  2-3  2-12  3-4  4-5  4-13  5-6  15-16  16-17  16-26  17-18  18-19  18-27
19-20
ring bonds :
1-7  1-11  7-8  8-9  9-10  10-11  15-21  15-25  21-22  22-23  23-24  24-25
exact/norm bonds :
2-12  4-5  4-13  16-26
exact bonds :
1-2  2-3  3-4  15-16  16-17  17-18  19-20
normalized bonds :
1-7  1-11  7-8  8-9  9-10  10-11  15-21  15-25  18-19  18-27  21-22  22-23  23-24
24-25
```

```
Hydrogen count :
2:>= minimum 1  3:>= minimum 2  16:>= minimum 1  17:>= minimum 2
Match level :
1:Atom  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:Atom  8:Atom  9:Atom
10:Atom  11:Atom  12:CLASS  13:CLASS  15:Atom  16:CLASS  17:CLASS  18:CLASS
19:CLASS  20:CLASS  21:Atom  22:Atom  23:Atom  24:Atom  25:Atom  26:CLASS  27:CLASS

fragments assigned product role:
containing 15
fragments assigned reactant/reagent role:
containing 1
Element Count :
Node 6: Limited
    C,C2-5




L1      STRUCTURE UPLOADED

=> search l1 sss sam
SAMPLE SEARCH INITIATED 08:12:58 FILE 'CASREACT'
SCREENING COMPLETE -     708 REACTIONS TO VERIFY FROM      53 DOCUMENTS

100.0% DONE     708 VERIFIED     0 HIT RXNS                 0 DOCS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED VERIFICATIONS:    12565 TO    15755
PROJECTED ANSWERS:              0 TO        0

L2        0 SEA SSS SAM L1 (      0 REACTIONS)

=> search l1 sss full
FULL SEARCH INITIATED 08:13:10 FILE 'CASREACT'
SCREENING COMPLETE -   11926 REACTIONS TO VERIFY FROM    1016 DOCUMENTS

100.0% DONE  11926 VERIFIED     49 HIT RXNS                10 DOCS
SEARCH TIME: 00.00.03

L3        10 SEA SSS FUL L1 (    49 REACTIONS)

=> d scqan
'SCQAN' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

ABS -------- GI and AB
ALL -------- BIB, AB, IND, RE, Single-step Reactions
APPS ------- AI, PRAI
BIB -------- AN, plus Bibliographic Data
CAN -------- List of CA abstract numbers without answer numbers
CBIB ------- AN, plus Compressed Bibliographic Data
DALL ------- ALL, delimited (end of each field identified)
IABS ------- ABS, indented with text labels
IALL ------- ALL, indented with text labels
IBIB ------- BIB, indented with text labels
IND -------- Indexing data
```

```
IPC -------- International Patent Classifications
ISTD ------- STD, indented with text labels
OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

MAX -------- Same as ALL
PATS ------- PI, SO
SCAN ------- TI and FCRD (random display, no answer number.  SCAN
             must be entered on the same line as DISPLAY, e.g.,
             D SCAN.)
SSRX ------- Single-Step Reactions (Map, Diagram, and Summary for
             all single-step reactions)
STD -------- BIB, IPC, and NCL

CRD -------- Compact Display of All Hit Reactions
CRDREF ----- Compact Reaction Display and SO, PY for Reference
FHIT ------- Reaction Map, Diagram, and Summary for first
             hit reaction
FHITCBIB --- FHIT, AN plus CBIB
FCRD ------- First hit in Compact Reaction Display (CRD) format
FCRDREF ---- First hit in Compact Reaction Display (CRD) format with
             CA reference information (SO, PY).  (Default)
FPATH ------ PATH, plus Reaction Summary for the "long path"
FSPATH ----- SPATH, plus Reaction Summary for the "short path"
HIT -------- Reaction Map, Reaction Diagram, and Reaction
             Summary for all hit reactions and fields containing
             hit terms
OCC -------- All hit fields and the number of occurrences of the
             hit terms in each field.  Includes total number of
             HIT, PATH, SPATH reactions. Labels reactions that have
             incomplete verifications.
PATH ------- Reaction Map and Reaction Diagram for the "long
             path".  Displays all hit reactions, except those
             whose steps are totally included within another hit
             reaction which is displayed
RX --------- Hit Reactions (Map, Diagram, Summary for all hit reactions)
RXG -------- Hit Reaction Graphics (Map and Diagram for all hit reactions)
RXL -------- Hit Reaction Long (Map, Diagram, Summary for all hit reactions)
RXS -------- Hit Reaction Summaries (Map and Summary for all hit reactions)
SPATH ------ Reaction Map and Reaction Diagram for the "short
             path".  Displays all single step reactions which
             contain a hit substance.  Also displays those
             multistep reactions that have a hit substance in both
             the first and last steps of the reaction, except for
             those hit reactions whose steps are totally included
             within another hit reaction which is displayed

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS
at an arrow prompt (=>).  Examples of combinations include: D TI;
D BIB RX; D TI, AU, FCRD.  The information is displayed in the same order
as the specification.  All of the formats, except CRD, CRDREF, FHIT, PATH,
FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may
be used with the DISPLAY command to display the record for a specified
Accession Number.

ENTER DISPLAY FORMAT (FCRDREF):end

=> d scan
```

TI   Asymmetric syntheses of β-phenylalanine, α-methyl-β-
      phenylalanines and derivatives

RX(3) OF 25

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

TI   High asymmetric induction in the 1,3-dipolar cycloaddition of
      (R)-(+)-p-tolyl vinyl sulfoxide with acyclic nitrones

RX(2) OF 8

TI   Parallel synthesis of homochiral β-amino acids

RX(79) OF 195

TI   Homochiral lithium amides for the asymmetric synthesis of β-amino
      acids

HCl, Et2O

HCl
93%
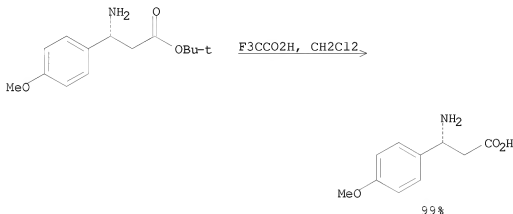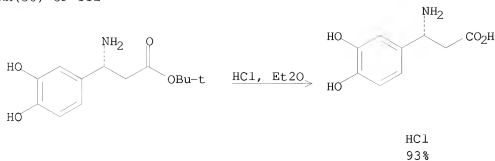
L3   10 ANSWERS   CASREACT   COPYRIGHT 2008 ACS on STN

TI   Enantioselective enzymatic reactions in miniemulsions as efficient
     "nanoreactors"

RX(1) OF 2

Lipase, NaOH, t-BuOMe,
Water

41%

NOTE: biotransformation, enzymic, Amano lipase PS used, alternative
      reaction conditions gave lower yield

L3   10 ANSWERS   CASREACT   COPYRIGHT 2008 ACS on STN

TI   New access to racemic β3-amino acids

RX(31) OF 80

1. Amberlite IR20
2. NH3, Water

91%

HCl
(step 1)

L3   10 ANSWERS   CASREACT   COPYRIGHT 2008 ACS on STN

TI   Synthesis of the enantiomers and N-protected derivatives of
     3-amino-3-(4-cyanophenyl)propanoic acid

1. HCl, Water
2. Water

66%
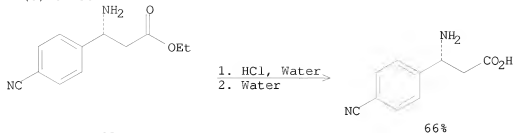
HCl
(step 1)

NOTE: in stage 2 crude product desalted by ion-exchange chromatog. on
Varion KS resin

L3   10 ANSWERS   CASREACT   COPYRIGHT 2008 ACS on STN

TI   Lipase kinetic resolution of racemic β-amino acids esters
RX(1) OF 4

Lipase, Me2CO, NaOH,
Water
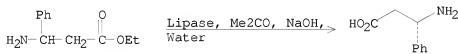
NOTE: biotransformation, enzymic, stereoselective, Amano Lipase PS
used

L3   10 ANSWERS   CASREACT   COPYRIGHT 2008 ACS on STN

TI   β-Amino acid enzymic manufacture and enantiomeric enrichment with
lipase
RX(1) OF 1

t-BuOMe, Water
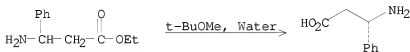
NOTE: alternative prepn. shown, biotransformation, enzymic,
Pseudomanas cepacia used

L3   10 ANSWERS   CASREACT   COPYRIGHT 2008 ACS on STN

TI   Preparation of enantiomerically enriched aromatic β-amino acids via
enzymatic resolution
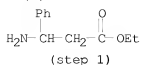
1. Lipase, KH2PO4,
   Water
2. NaOH, Water, AcOEt
(step 1)

44%

+

36%
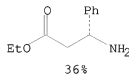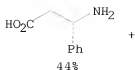
NOTE: biotransformation, stereoselective enzymic hydrolysis, Amano PS
      used

ALL ANSWERS HAVE BEEN SCANNED

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ANSWER SET L3 HAS BEEN SAVED AS 'RXNHITS/A'

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COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                           ENTRY   SESSION
FULL ESTIMATED COST   120.72   120.93

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FILE LAST UPDATED: 8 Jun 2008 (20080608/ED)

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=> l3
L4   10 L3

=> d l4 1-10 ti

L4   ANSWER 1 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
TI   Parallel synthesis of homochiral β-amino acids

```
L4    ANSWER 2 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Homochiral lithium amides for the asymmetric synthesis of β-amino
      acids

L4    ANSWER 3 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Enantioselective enzymatic reactions in miniemulsions as efficient
      "nanoreactors"

L4    ANSWER 4 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    New access to racemic β3-amino acids

L4    ANSWER 5 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Synthesis of the enantiomers and N-protected derivatives of
      3-amino-3-(4-cyanophenyl)propanoic acid

L4    ANSWER 6 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    β-Amino acid enzymic manufacture and enantiomeric enrichment with
      lipase

L4    ANSWER 7 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Lipase kinetic resolution of racemic β-amino acids esters

L4    ANSWER 8 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Preparation of enantiomerically enriched aromatic β-amino acids via
      enzymatic resolution

L4    ANSWER 9 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Asymmetric syntheses of β-phenylalanine, α-methyl-β-
      phenylalanines and derivatives

L4    ANSWER 10 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    High asymmetric induction in the 1,3-dipolar cycloaddition of
      (R)-(+)-p-tolyl vinyl sulfoxide with acyclic nitrones


=> d l4 3,5,6,7,8 ti fbib abs

L4    ANSWER 3 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Enantioselective enzymatic reactions in miniemulsions as efficient
      "nanoreactors"
AN    2006:242246  CAPLUS
DN    144:431190
TI    Enantioselective enzymatic reactions in miniemulsions as efficient
      "nanoreactors"
AU    Groeger, Harald; May, Oliver; Huesken, Hendrik; Georgeon, Sandrine; Drauz,
      Karlheinz; Landfester, Katharina
CS    Service Center Biocatalysis, Degussa AG, Hanau, 63403, Germany
SO    Angewandte Chemie, International Edition (2006), 45(10), 1645-1648
      CODEN: ACIEF5; ISSN: 1433-7851
PB    Wiley-VCH Verlag GmbH & Co. KGaA
DT    Journal
LA    English
OS    CASREACT 144:431190
AB    Phasing in: Miniemulsions are homogeneous mixts. in which the organic phase is
      dispersed in the form of nanometerscale droplets, which can act as
      efficient "nanoreactors" for enantioselective enzymic transformations.
      Very high substrate concns. are possible, and both α- and
      β-amino acids were prepared with high conversions and up to > 99% ee.
RE.CNT  25    THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4    ANSWER 5 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
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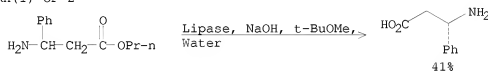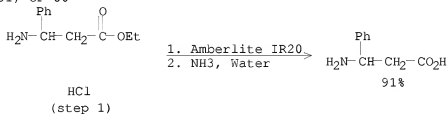
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TI   Synthesis of the enantiomers and N-protected derivatives of
     3-amino-3-(4-cyanophenyl)propanoic acid
AN   2004:498532  CAPLUS
DN   141:191019
TI   Synthesis of the enantiomers and N-protected derivatives of
     3-amino-3-(4-cyanophenyl)propanoic acid
AU   Solymar, Magdolna; Kanerva, Liisa T.; Fulop, Ferenc
CS   Institute of Pharmaceutical Chemistry, University of Szeged, Szeged,
     H-6701, Hung.
SO   Tetrahedron: Asymmetry (2004), 15(12), 1893-1897
     CODEN: TASYE3; ISSN: 0957-4166
PB   Elsevier Science B.V.
DT   Journal
LA   English
OS   CASREACT 141:191019
AB   Racemic Et 3-amino-3-(4-cyanophenyl)propanoate was synthesized and the
     enantiomers separated through enantioselective N-acylation by Candida
     antarctica lipase A (CAL-A) in neat Bu butanoate.  The free amino acid
     enantiomers were transformed to the Boc and Fmoc-protected derivs. (Boc =
     tert-butoxycarbonyl, Fmoc = 9-fluorenylmethyloxycarbonyl).
RE.CNT   27    THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4   ANSWER 6 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   β-Amino acid enzymic manufacture and enantiomeric enrichment with
     lipase
AN   2003:897664  CAPLUS
DN   139:363702
TI   β-Amino acid enzymic manufacture and enantiomeric enrichment with
     lipase
IN   Groeger, Harald; Werner, Helge
PA   Degussa A.-G., Germany
SO   Jpn. Kokai Tokkyo Koho, 8 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 2
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PI JP 2003325197	A	20031118	JP 2003-130565		20030508
			DE 2002-10220740	A	20020508
DE 10220740	A1	20031127	DE 2002-10220740		20020508
SG 120092	A1	20060328	SG 2003-2077		20030409
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IN 2003KO00252	A	20041218	IN 2003-KO252		20030502
			DE 2002-10220740	A	20020508
CA 2428163	A1	20031108	CA 2003-2428163		20030507
			DE 2002-10220740	A	20020508
CN 1456676	A	20031119	CN 2003-123428		20030507
			DE 2002-10220740	A	20020508
EP 1367129	A2	20031203	EP 2003-10226		20030507
EP 1367129	A3	20031217			

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     R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
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			DE 2002-10220740	A	20020508
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US 6869781	B2	20050322			
			DE 2002-10220739	A	20020508
			DE 2002-10220740	A	20020508
US 20050142646	A1	20050630	US 2005-52243		20050208
US 6987010	B2	20060117			
			DE 2002-10220739	A	20020508

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                                          US 2003-430382     A3 20030507
PATENT FAMILY INFORMATION:
FAN  2003:891993
     PATENT NO.           KIND  DATE       APPLICATION NO.           DATE
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PI   EP 1361279           A1    20031112   EP 2003-10224             20030507
     EP 1361279           B1    20060705
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                          DE 2002-10220739   A  20020508
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                                          DE 2002-10220739   A  20020508
                                          DE 2002-10220740   A  20020508
                                          US 2003-430382     A3 20030507
OS   CASREACT 139:363702
AB   β-Amino acid esters are incubated with lipase in the presence of
     water-organic solvent two-phase reaction medium for enantiomeric enrichment
     of β-amino acids without the N-protection process.  Preparation of
     (S)-3-amino-3-phenylpropionic acid with lipase Amano PS from racemic
     3-amino-3-phenylpropionic acid Et ester in the water-acetone reaction
     medium was shown.


L4   ANSWER 7 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Lipase kinetic resolution of racemic β-amino acids esters
AN   2003:891993  CAPLUS
DN   139:363709
TI   Lipase kinetic resolution of racemic β-amino acids esters
IN   Groeger, Harald; Werner, Helge
PA   Degussa A.-G., Germany
SO   Eur. Pat. Appl., 10 pp.
     CODEN: EPXXDW
DT   Patent
LA   German
FAN.CNT 2
     PATENT NO.           KIND  DATE       APPLICATION NO.           DATE
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PI   EP 1361279           A1    20031112   EP 2003-10224             20030507
     EP 1361279           B1    20060705
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     US 6987010           B2     20060117
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     EP 1367129           A3     20031217
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
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     US 20050142646       A1     20050630    US 2005-52243          20050208
     US 6987010           B2     20060117
                                    DE 2002-10220739    A  20020508
                                    DE 2002-10220740    A  20020508
                                    US 2003-430382      A3 20030507
OS   CASREACT 139:363709; MARPAT 139:363709
AB   A process is provided for the preparation of enantiomerically enriched
     β-amino acids by a lipase catalyzed kinetic resolution of racemic
     β-amino acid esters.  Thus, 1.79 g of 3-Amino-3-phenylpropanoic acid,
     Et ester was dissolved in 50 mL water and 3 mL acetone in a pH-stat.  The
```

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      pH was controlled at 8.2 and the reaction temperature was 20 °C.  The
      reaction was started with the addition of 200 mg of Pseudomonas cepacia
      lipase.  After three hours, the reaction produced a 48.7% yield of
      (S)-3-Amino-3-phenylpropanoic acid with an enantiomeric excess of 96.%.
RE.CNT   4       THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
                 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4     ANSWER 8 OF 10  CAPLUS  COPYRIGHT 2008 ACS on STN
TI     Preparation of enantiomerically enriched aromatic β-amino acids via
       enzymatic resolution
AN     2000:270001 CAPLUS
DN     133:43775
TI     Preparation of enantiomerically enriched aromatic β-amino acids via
       enzymatic resolution
AU     Faulconbridge, Susan J.; Holt, Karen E.; Sevillano, Luis Garcia; Lock,
       Christopher J.; Tiffin, Peter D.; Tremayne, Neil; Winter, Stephen
CS     Celltech Chiroscience Ltd, Cambridge Science Park, Cambridge, CB4 0WG, UK
SO     Tetrahedron Letters (2000), 41(15), 2679-2681
       CODEN: TELEAY; ISSN: 0040-4039
PB     Elsevier Science Ltd.
DT     Journal
LA     English
OS     CASREACT 133:43775
AB     A range of enantiomerically enriched aromatic β-amino acids with high ee
       were prepared via lipase-catalyzed enzymic resolution of Et ester derivs.
RE.CNT   8       THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
                 ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> enzyme
        855963 ENZYME
        488770 ENZYMES
L5     1080659 ENZYME
                (ENZYME OR ENZYMES)


=> l4 and l5
L6           1 L4 AND L5


=> d l6

L6     ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
AN     2003:891993 CAPLUS
DN     139:363709
TI     Lipase kinetic resolution of racemic β-amino acids esters
IN     Groeger, Harald; Werner, Helge
PA     Degussa A.-G., Germany
SO     Eur. Pat. Appl., 10 pp.
       CODEN: EPXXDW
DT     Patent
LA     German
FAN.CNT 2
       PATENT NO.          KIND   DATE         APPLICATION NO.        DATE
       ---------------     ----   --------     --------------------   --------
PI     EP 1361279          A1     20031112     EP 2003-10224          20030507
       EP 1361279          B1     20060705
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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       DE 10220739         A1     20031127     DE 2002-10220739       20020508
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       IN 2003KO00251      A      20041218     IN 2003-KO251          20030502
       CA 2428059          A1     20031108     CA 2003-2428059        20030507
       CN 1456675          A      20031119     CN 2003-123427         20030507
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          AT 332391            T       20060715      AT 2003-10224           20030507
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          JP 2003325195        A       20031118      JP 2003-130566          20030508
          US 20050142646       A1      20050630      US 2005-52243           20050208
          US 6987010           B2      20060117
PRAI      DE 2002-10220739     A       20020508
          DE 2002-10220740     A       20020508
          US 2003-430382       A3      20030507
OS    CASREACT 139:363709; MARPAT 139:363709
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT



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                                                         ENTRY       SESSION
FULL ESTIMATED COST                                      60.06       180.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)             SINCE FILE      TOTAL
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                                                         ENTRY       SESSION
FULL ESTIMATED COST                                      60.06       180.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)             SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                      -4.00        -4.00

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L3          10 SEARCH L1 SSS FULL
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L5     1080659 ENZYME
L6           1 L4 AND L5

=> cepacia
L7        3855 CEPACIA

=> buffer
      248192 BUFFER
       36515 BUFFERS
L8      267634 BUFFER
                (BUFFER OR BUFFERS)

=> 17(1)18
L9          73 L7(L)L8

=> esterif?
L10     136800 ESTERIF?

=> 18(1)110
L11         797 L8(L)L10

=> 19(1)110
L12           1 L9(L)L10

=> d 112 ti fbib abs

L12   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
TI    Lipase-catalyzed synthesis of kojic acid esters in organic solvents
AN    1998:797754  CAPLUS
DN    130:124920
TI    Lipase-catalyzed synthesis of kojic acid esters in organic solvents
AU    Liu, Kuan-Ju; Shaw, Jei-Fu
CS    Department of Food Engineering, Tungfang Junior College of Technology and
      Commerce, Kaoshiung, 82901, Taiwan
SO    Journal of the American Oil Chemists' Society (1998), 75(11), 1507-1511
      CODEN: JAOCA7; ISSN: 0003-021X
PB    AOCS Press
DT    Journal
LA    English
AB    Kojic acid (I) is an inhibitor of bacteria, viruses, and fungi.  I is used
      for inhibiting the browning effect of tyrosinase in the food and cosmetic
      industries.  To improve its lipophilic properties, Pseudomonas
      cepacia lipase and Penicillium camembertii lipase were used for
      catalyzing the esterification of kojic acid to synthesize kojic
      acid monolaurate and kojic acid monooleate.  These products showed a 69.5%
      inhibitory effect on tyrosinase in hydrophobic organic solvent.  The yields
      of kojic acid esters were affected by enzymes, substrates, organic solvent,
      and temperature  Lauric and oleic acids were the best substrates for
      esterification among various fatty acids tested.  CaCl2 and MnCl2
      stimulate Pseudomonas cepacia lipase-catalyzed
      esterification by 7.0%.  On the contrary, MgCl2, SrCl2, and ZnCl2
      inhibited the reaction.  The best pH of buffer for lipase
      pretreatment was pH 6.0.  Pseudomonas and Penicillium lipases can be
      reused for the synthesis of kojic acid esters.  After reaction at
      40°C for 10 d, the Penicillium and Pseudomonas lipases still
      retained 57.0% and 92.0% of their initial activities, resp.
RE.CNT  9      THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
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          132187 PHOSPHATES
L13       648900 PHOSPHATE
                   (PHOSPHATE OR PHOSPHATES)

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L14        63086 L13(L)L8

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MISSING OPERATOR 'L7(L0L10'
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

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L16            1 L14 AND L15

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L16   ANSWER 1 OF 1   CAPLUS   COPYRIGHT 2008 ACS on STN
AN    1998:768043  CAPLUS
DN    130:80431
TI    Manufacture of optically-active 2-hydroxy-1-indanones or their esters
      using hydrolases
IN    Kamishiro, Hiroshi; Mitamura, Shuichi; Hiyama, Tamejiro
PA    Nippon Steel Chemical Co., Ltd., Japan; Nippon Steel Corp.
SO    Jpn. Kokai Tokkyo Koho, 10 pp.
      CODEN: JKXXAF
DT    Patent
LA    Japanese
FAN.CNT 1
      PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
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PI    JP 10316607         A       19981202    JP 1997-139287         19970514
PRAI JP 1997-139287              19970514
OS    MARPAT 130:80431


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L16   ANSWER 1 OF 1   CAPLUS   COPYRIGHT 2008 ACS on STN
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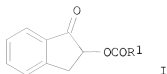
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AB   Optically-active 2-hydroxy-1-indanone (I) and/or their esters II [R1 = H,
      (un)substituted aryl, alkyl, alkenyl], useful as intermediates for drugs,
      etc., are manufactured by hydrolyzing enantiomeric mixture of II in the
presence
      of hydrolases. Alternately, optically-active I and/or II are manufactured by
      esterification of enantiomeric mixture of I with R1COR3 (R3 = halo, acyloxy)
      in the presence of hydrolases or by transesterification of enantiomer
      mixture of I with R1CO2R4 [R4 = H, (un)substituted aryl, alkyl, alkenyl] in
      the presence of hydrolases. A phosphate buffer/MeOH
      solution of (±)-II (R1 = Me) (III) was treated with L-1 (Burkholderia
      lipase) under shaking at room temperature for 3 h to give 16% (R)-I (75% e.e.)
      and 84% (S)-III (16% e.e.).

=> logoff hold
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                          ENTRY   SESSION
FULL ESTIMATED COST   84.69   205.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)   SINCE FILE   TOTAL
                                                          ENTRY   SESSION
CA SUBSCRIBER PRICE   -5.60   -5.60

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:32:04 ON 09 JUN 2008